Land acknowledgment

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Contributors

References
The Sustainability and Climate Change Committee (SACC) acknowledges that the University of Ottawa campus is located on the unceded, unsurrendered territory of the Anishinaabe Algonquin Nation whose presence here reaches back to time immemorial.

The Committee recognizes the Algonquins as the customary keepers and defenders of Kitchissippi (Ottawa River Watershed). We respects and affirm the inherent and Treaty Rights of all Indigenous Peoples across this land. We acknowledge the historical oppression of land, environment, culture, and the original Peoples in this country.

We recognize and honour the immense work and leadership of Indigenous land defenders across this land. We believe in the pursuit of planetary health as a contribution to healing and decolonization.

Kitchissippi Pimisi – This culturally and ecologically important species was nearly eradicated from the Ottawa River Watershed through centuries of industrial activity. Over the past decade, the Algonquins of Ontario (AOO) have combined traditional and scientific knowledge to restore their local population.¹
Planetary Health: "The achievement of the highest attainable standard of health, wellbeing, and equity worldwide through judicious attention to the human systems—political, economic, and social—that shape the future of humanity and the Earth’s natural systems that define the safe environmental limits within which humanity can flourish. Put simply, planetary health is the health of human civilisation and the state of the natural systems on which it depends”

- Lancet Commission on Planetary Health 2015

The Sustainability and Climate Change (SACC) Committee is an Aesculapian Society committee that acts on local initiatives within the Faculty of Medicine at the University of Ottawa to promote planetary health, sustainable practices and student wellbeing.

We are writing this Green Book to provide a guide for students in the Faculty of Medicine on a wide range of subjects centred around living a sustainable lifestyle. We hope this guide will serve as a resource to find information on living sustainably in the National Capital Region. Our aim is to provide straightforward and concrete actions that you can take to live an environmentally friendly lifestyle. We hope this book will inspire you to make changes (big or small) in your day-to-day life in order to have a collective impact as a student body.

While some of the information in this book is specific to the University of Ottawa and The National Capital Region, note that many of these concepts and resources can apply wherever you find yourself in Canada and abroad.
The Green Book is focused on individual actions, allowing individuals to take a more active role and become more invested in contributing positively towards planetary health. It must be noted, however, that individual actions are not enough. To be able to meet climate targets and avoid global warming beyond 1.5 degrees °C, it is necessary to advocate systemic change. This can range from political advocacy, to divestment efforts, to ensuring large corporations are held accountable for their detrimental role in undermining planetary health.

If you have any questions, comments or are interested in getting involved do not hesitate to reach out to the SACC committee:

Email: uottawasacc@gmail.com
Facebook: UOttawa Sustainability and Climate Change Committee
Instagram: @uottawasacc
Website: uOttawa SACC
As we recognize that climate change and issues of degradation of natural systems are the defining challenges of the 21st century, we must also begin to understand the repercussions of these changes on human health.³

The health consequences of climate change disproportionately affect communities and individuals already susceptible to poorer health outcomes. BIPOC (Black, Indigenous, and People of Colour) communities, as well as individuals living in lower socioeconomic conditions, rural and remote communities, and newcomers all face a greater risk of climate change related harm.³
It is imperative that medical students and trainees are educated on the future burden of disease that climate change will pose on their patients. Additionally they must learn to be better stewards of the environment in their future practice. It is equally important that medical education programs provide training and resources to enable them to reduce their footprint in health care.

Currently, the Canadian healthcare system is estimated to contribute 5% of the national share of greenhouse gas emissions. To put this in perspective, this is almost double the estimated emissions from all Canadian air travel.

While there are many challenges to the climate crisis, there are many reasons to be optimistic that sustainable, equitable targets will be reached. Medical students and physicians are in a privileged position because when we talk, others listen. It is necessary to leverage this position of public trust responsibly through advocating for climate action and justice. In many cases, it is physicians who are leading the fight for planetary health.

The next generation of medical students must learn to be better stewards of the environment in their future practice.
The transportations sector currently accounts for 23% of Canada’s GHG emissions. In order to reduce this share of our emissions, we must transition to zero and low-emissions modes of transportation. Additionally, we can reduce our emissions by choosing to live closer to our school and work places, by choosing active transportation and public transportation and by opting to carpool.

Not featured in this diagram are zero emissions transportation such as cycling and walking. When deciding how to get from point A to point B, it is important to think about the impacts of that travel on your health, your wallet, and the environment. In many cases, the sustainable option is also healthier and more cost effective.

If you must take a higher emission mode of transport, consider purchasing a carbon offset to reduce the impact of your travel.
VIA rail offers convenient and reasonably priced tickets along its corridor route from Quebec city to Windsor. Ottawa is serviced by two intercity rail stations:

- Ottawa Central Station: located on near downtown on Tremblay Road
- Fallowfield Station: Located in Barrhaven

Intercity bus services:

- MegaBus offers reasonably priced trips between Montreal and Toronto and makes frequent stops in Ottawa: [https://ca.megabus.com/](https://ca.megabus.com/)
- Ontario Northland offers trips within Ontario that are especially convenient for trips between Ottawa and Northern Ontario. Certain routes stop at The Ottawa Hospital and CHEO: [https://www.ontarionorthland.ca](https://www.ontarionorthland.ca)

Carpooling: please join our carpooling Facebook group shared with all students in the Faculty of Medicine

- **Best practices for safe carpooling:** It is important to practise safe carpooling measures during the pandemic to keep everyone safe. Attached below is the proper etiquette to follow when choosing to carpool.


Air travel

- Ottawa International Airport: while the SACC does not recommend air travel for short distance intercity travel, some students must rely on air travel to get to and from Ottawa. When flying, do consider using public transportation to get to and from the airport and purchasing carbon offsets for your flight (information on these can be found on websites such as Enbridge - [https://www.enbridge.com/energy-matters/energy-tips/offsets](https://www.enbridge.com/energy-matters/energy-tips/offsets)).
Public Transit

• Ottawa and Gatineau have both bussing and O-Train as public transit options. Included in your tuition is an all access pass (U-Pass) to OCtranspo as well as STO (Société de Transport de l’Outaouais) services!

• Day passes, Presto cards, and transfers can be used between OC Transpo buses and the O-Train. Below is a transit map that includes the main hospital campuses and what transit you would need to reach there.

• Some great apps to help you plan your travels can be found on this site: https://www.octranspo.com/en/plan-your-trip/travel-tools/app-gallery/
II. Getting around Ottawa

**Biking**

- Ottawa boasts its vast cycling infrastructure, with over 980 km of multi-use pathways, bike lanes, off-road paths and paved shoulders. You can also use the bike racks on most OC transpo buses and by using the first car of the train when taking the LRT.
- Winter or summer, cycling in Ottawa is an excellent way to get around and see the city.

**Intercampus shuttles**

- There is a free intercampus shuttle bus that runs from the Roger Guindon campus to the downtown UOttawa campus. The schedule can be found here: https://www.uottawa.ca/parking/shuttle-bus
- There is also a free intercampus shuttle between 3 major hospitals; The Ottawa Hospital, The Civic and Riverside. The shuttle departs from the main entrances of the Civic and Riverside, and the Critical Care Wing of the General.
Skate the canal
During the winter months, Ottawa is known for its creative and fun modes of transportation. The Rideau Canal is transformed into a skating rink that spans approximately 7.8 km through the heart of downtown Ottawa.

E-scooters
Public E-scooters are easily available in downtown Ottawa. This is another sustainable and fun option to use when travelling around downtown Ottawa.

Fall Rhapsody STO bus service
Want to get out and see the fall colours? STO offers a limited bus service through Gatineau park during peak leaf watching season! You can catch it from downtown Ottawa and ride to Pink Lake, Mackenzie King Estate, and Champlain Lookout.

Cross country skiing
Ottawa has many kilometers of groomed cross country ski trails that stretch from the downtown to the greenbelt!

By water
The Rideau Canal waterway connects Ottawa to Lake Ontario via Kingston. Along with the Ottawa and Gatineau Rivers, you will find amazing canoeing, kayaking and stand up paddleboarding.
CHAPTER 3

REDUCING WASTE

In this section you will find information on sorting waste in Ottawa and Gatineau reducing waste at home and reducing waste as a healthcare professional. Head to National Zero Waste Council for more information: http://www.nzwc.ca/.

I. Sorting waste in Ottawa and Gatineau

This infographic shows how waste is sorted in Ottawa. In Gatineau, waste is sorted into four bins: grey bin (garbage), blue bin (plastics, paper and cardboard, metal, glass), brown bin (compost).

GLASS, METAL, PLASTIC
- empty bottles and jars (and lids)
- cans
- aluminum foil (clean or soiled)
- empty paint and aerosol cans
- plastic containers (#1-7)
- take out containers
- flower pots and planting trays
- plastic bottles and jugs
- tubs and tub lids
- milk and juice cartons
- drink boxes

COMPOST
- Food waste
- Soiled paper products (pizza boxes, paper plates, muffin wrappers, paper towels, coffee filters, tea bags, waxed paper, food soiled boxes, coffee cups (wax-lined))
- yard waste
*Any plastic bag can be used to dispose of compost! Great way to reuse milk and bread bags.

PAPER, CARDBOARD
- Newspaper
- Toilet paper roll tube
- Frozen dinner boxes
- Any printer or writing paper
*Paper and cardboard must be clean!
*Goes to garbage: cereal and cracker box liners, chocolate and candy wrappers, foil wrapping paper and ribbons, orange crates

GARBAGE
- Ceramics
- Drinking glasses
- Light bulbs
- Mirrors
- Metal clothes hangers
- Chip bags
- #6 polystyrene (styrofoam containers, coffee cup lids, meat trays, foam clam-shell containers)
- Plastic bags
- Hard plastics (dishes, toys, makeup jars, laundry baskets)

It is important to sort your waste appropriately to avoid contaminating recyclable materials, which would render them destined for the dump. Reduce contamination by:

- Emptying and rinsing containers
- Using the City of Ottawa Collection App/Waste Explorer or the Gatineau waste app D TRI TUS to search an item if you are unsure which bin it falls into.6,7
- Becoming conscious of what items go into the garbage and try to avoid purchasing these in the future.
- Kindly educating peers on the importance of proper sorting.
II. In the kitchen

Cleaning
- Use reusable wash-cloths for every action that requires a cloth! This may include washing the counters or the dishes, cleaning a mess, drying your hands or even to replace paper napkins
- Use homemade cleaning products (ex: vinegar and orange peels - see the recipe on the side)

Refill your cleaning products bottles instead of buying new bottles every time. Different stores offer this service, and Nu Grocery in Ottawa is a great example -plus their refill wall is very cool to use!

Food storage
Avoid single-use items like Ziploc bags and plastic wrap, consider alternatives such as:
- Cloth bags
- Reusable silicone bags
- Any kind of reusable container
- Used jam/spaghetti jar.
- Beeswax wrap to wrap different food items. They are very easy to use and can simply be washed in cold water.

Resources and Apps for Sustainability
If you live in an apartment and don’t have access to a compost bin there are few options available to you
1) Box of Life
This is a small Ottawa based company that creates Vermicompost containers that are specifically designed for apartment living. They don’t smell, work great with pets and produce amazing soil that you can use for all your gardening needs or donate the soil to others.
1) Download the ShareWaste App
This app allows you to see who in your area has a compost bin that is willing to take your compost waste. Each donor has a list of items they will compost, read carefully and start sharing your waste today!

Ingredients
Peel from 1 large orange per pint mason jar
Distilled White Vinegar
Pint Mason Jar(s)

Instructions
1. Remove pith from orange peel if desired
2. Cut orange peels into one (1) inch pieces
3. Add peel from 1 orange to a mason jar and fill to about ¼ of the way with distilled white vinegar
4. Label with date and leave in refrigerator for 2 weeks to cure
5. After two weeks, strain liquid into storage jar.
6. Throw away the orange peels
7. To use cleaner, mix 1 part Orange Cleaner Concentrate with 2 parts water
The Case for Slow Fashion

- In recent years, fast fashion companies have come under increasing criticism for their generation of toxic pollutants, unsustainable use of resources, and unsafe, inhumane working conditions.
- Textile production emits 1.2 billion tons of CO2 per year, more than international flights and shipping combined.\(^8\)
- In Canada, each household throws away 46 kg of clothing per year. Textiles make up 8-12% of municipal landfills.\(^9\)

How can you help? 5 R’s - refuse, reduce, reuse, repair, recycle

Before buying clothes, consider
- Is there a way I can restyle myself using clothes I already have?
- How can I take better care of my clothes so that the quality lasts longer?

Stay critical of fast fashion companies
When buying, question:
- Is the company greenwashing?
- Does the company respect workers’ rights?
- Does the company’s values align with yours?
- Do I really need this? Is this a good investment?

Support local and/or sustainable brands
- Reduces waste of online shopping
- Examples of sustainable leaders in fashion: Patagonia, Everlane, Columbia, Reformation

By: Sarah Lazarovic
III. In the closet

Buy used
- Local stores:
  ○ Value Village Bank St
  ○ Society of St. Vincent de Paul
  ○ Clothes Encounters Of A Second Time
  ○ Ragtime Vintage
  ○ The Clothes Secret
  ○ Rikochet Resale
  ○ Darling Vintage
  ○ Bellwethers Vintage
  ○ The Free Store on uO main campus
  ○ garage sales
- Online platforms:
  ○ ThredUp (online thrift store)
  ○ Depop
  ○ Varage Sale
  ○ Facebook Marketplace
  ○ Poshmark
  ○ Etsy

By: Sarah Lazarovic

Give clothes a second life - donate, pass items down to family, exchange with friends, sell online, repair, thrift-flip, or make it new (while learning new skills!)
- Local organizations accepting donations:
  ○ The Ottawa Mission
  ○ Society of St. Vincent de Paul
  ○ Dress for Success Ottawa
  ○ Women’s shelters (ex. Cornerstone Housing)
  ○ The Kidney Foundation
  ○ Value Village
- Learn basic skills like sewing buttons and tears
- Thrift flip ideas: cut, embroider, tie-dye, distress, paint, hem, readjust, or sew something completely new. Get creative! There are tons of ideas on Youtube, Pinterest, online blogs, and even Tik Tok.
IV. In the bathroom

Hair? Use bar shampoo and conditioner from Unwrapped Life or local artisans to decrease your plastic use.

Toilet paper roll? Add a recycling bin in your washroom and toss it in there. Did you know that 69% of Americans recycle, but that 40% don’t do so in the bathroom?

Beauty and self-care products with packaging (and shipping)? Making your own beauty products can eliminate shipping and wrapping. You can find multiple recipes on the internet for things like face and hair masks, lip and foot scrubs, and moisturizer.

Soap and body gel? Swap the plastic bottle version for bar soaps.

Makeup remover? Instead of disposable cotton pads, try reusable makeup remover pads or use a wash.

Toothbrush? Look for biodegradable bamboo toothbrushes and try giving your toothbrush a second life as a tool for cleaning.

Shaving? Go for an old-school double edge safety razor as opposed to a disposable razor - you only need to replace the blade and can keep the razor for years. Sugar waxing is another sustainable hair removal option.

Let’s be more sustainable. Period. Did you know that the average woman will use 16,800 disposable pads and tampons during her lifetime? These products are not compostable, create unneeded waste and profit at the expense of women’s health and the environment. Thankfully, there are sustainable, cost-friendly and more comfortable alternatives! Find them on the next page.
Let’s be more sustainable. Period.

<table>
<thead>
<tr>
<th>Reusable menstrual product</th>
<th>As compared to disposable products</th>
<th>Features</th>
</tr>
</thead>
</table>
| Menstrual cup (DivaCup)    | Lasts 2-4 years on average; some even say 10 years! This means less waste and spending for you. | 12 hours of protection, leak-proof and comfort.  
*Tip #1: Common misconceptions? Menstrual cups DON’T have a higher risk of infection.* |
| Reusable pads and pantyliners | As absorptive as disposable pads and comfortable to wear | Washer/dryer-friendly, which means they’re easy to reuse.  
*Tip #2: Canadian companies? Lunapads (compostable shipping + kit deal), Zero & Co, Treehugger Cloth Pads* |
| Period underwear           | As absorptive as diapers, which is 2x as much as a tampon. They feel and look just like regular underwear. | Perfect for lighter flow days and they’re completely machine washable! Very comfortable.  
*Tip #3: Underwear types? Lunapad has different types of period underwear (bikini, boxer brief, and hipster) that you can add reusable liners on heavier flow days.* |

V. In the laundry room

Consider your energy use and the products you use

- Dry your clothes naturally on a clothesline – saves a lot of power and clothes last longer!
- Refills for your cleaning product bottles instead of buying new bottles
- Wool balls can replace dryer sheets
- Consider alternatives to cleaning products that don’t use any soap
- TrueEarth makes eco-friendly laundry detergent strips which are worth experimenting with.
VI. In the Office

Going Paperless
- Home and work office-paper use contributes to about 90% of all office specific waste in the United States
- Replace paper with electronic devices such as virtual note taking and document storage OR utilize reusable white-boards to conserve paper
- When paper use is necessary, purchase Forest Stewardship Council (FSC) certified or recycled paper products, and use refillable printer ink cartridges for printing

Sustainable Lighting
- Lighting energy costs are another burden of office use, especially with the rise of home offices
- Reduce light expenditure by utilizing natural lighting and setting up one’s home office near a window
- Not only is this sustainable, but it also increases productivity and mood
- Light timers and dimmers, can also be used to reduce energy expenditure of artificial lighting
VI. In the Office

Choosing Environmentally Friendly Office Equipment

- With office-equipment production requiring unsustainable and non-biodegradable materials, their environmental damage is substantially large.
- The best way to be environmentally conscious when selecting office supplies is buying used or recycled office products.
- When replacing office materials, strive to recycle, reuse, or resell them to avoid waste.
- If buying new office equipment, aim to buy products built through sustainable and regulated means, such as those carrying Forest Stewardship Council (FSC) or Programme for the Endorsement of Forest Certification (PEFC) accreditation.

Eco-friendly office supplies

- Paper products - Greenline Paper
- Pencils - Tree Wise Pencils
- Pens - Eco-Pens.com
- Solar Chargers - Renogy
- Staple-free Stapler - Made by Humans
- Desks and chairs - Indiegetup
VII. Reducing waste in healthcare

While following COVID-19 precautions
• Recycling PPE using Terra-Cycle Boxes. Click here to find the boxes in RGN and learn what they accept. Green Circle Salons also offers PPE recycling.
• Favor washable masks when it’s possible, by making sure your mask fits the criteria proposed by the Government of Canada
• Choose hand hygiene instead of over-using gloves when it’s possible. Follow the CDC’s guidelines to know when to use gloves

At the Hospital
• Waste from items opened during surgery, such as paper, cardboard, or plastic can be recycled in special blue bins.
• Healthcare providers should be mindful when restocking in-room supplies, especially those composed of plastic, and only bring into the room what is necessary to provide safe patient care.
• Food and packaging waste was found to be high in Canadian hospitals.

Note:
A large portion of Canadian hospital waste is incinerated, when research shows only 1-2% of medical waste actually needs to be incinerated. This demonstrates that there is room for improvement in diverting waste away from the incinerator.
“Food is medicine”
This famous saying refers not only to what we put on our plates for dinner, but also the way in which we cultivate food.

According to the Lancet, “Food is the single strongest lever to optimize human health and environmental sustainability on Earth”. Our current global food system does not have the capacity to meet the nutritional needs of our growing population without irreversible damage to the planet.

To mitigate this, the Lancet has developed the planetary health diet. A large body of work supports that a diet rich in plant based foods can confer both improved health and environmental benefits. Here are our top tips for eating more sustainably!

**Grocery Shopping**

**Grocery shopping options to reduce your waste and plastic use**
- NU Grocery Store
- Bulk Barn
- Ottawa Organics
- Herb & Spice Shop
- Download the app TooGoodToGo. Get groceries, treats and meals that shops are selling for a fraction of the cost and reduce food waste
I. Grocery Shopping

Tips to reduce your waste when grocery shopping

- Bring a shopping list and plan meals in advance. You will most likely do less trips, save time, and be less likely to over purchase or waste food.
- Bring your reusable bags: make sure to keep them in a safe place – in the car, in your purse, bike basket etc.
- Try to avoid bagging your produce with the provided plastic bags – put them in your cart right away or invest in reusable produce bags.
- Buy in bulk: rice is a good example since it stays good for a long time. You can do the same for toiletry items such as hand soap etc.

- Shop at farmers’ markets when available! Many stands are happy to reuse containers and it supports local food systems, which tend to produce less waste.
- Try your own recipes as opposed to prepared meals (your own cooking is more sustainable and a healthier option)
- Choose glass or paper packaging over plastic packaging.
- Avoid excessive packaging e.g. single-serve wrapped snacks
- Choose active transportation or collective transport

Restaurants, Cafes, Vegetarian Options

The restaurant guide called ‘Dining Zero Waste Ottawa’ includes recommendations on what to bring to avoid producing waste while eating out at specific restaurants. This guide also includes a list of restaurants that take active steps in reducing waste such as providing cloth napkins, reusable plates and cutlery or drinks without plastic straws.
## II. Restaurants

### Near RGN

**The Green Door Vegetarian Restaurant**  
Ottawa’s oldest vegetarian staple, a buffet-style, pay by weight restaurant and bakery. 198 Main Street

**Chickpeas**: A delicious falafel and hummus eatery. 500 Terminal Ave

### Centretown

**Pure Kitchen**: vegetarian restaurant and juice bar with a delicious scratch kitchen. 340 Elgin Street, 345A Preston Street, 357 Richmond Rd

**Alice**: Award-winning Chef Briana Kim brings you a unique vegetable and fermentation focused menu. 40 Adeline Street

**Raw-Pulp Grind**: Offers a raw menu which includes bowls, smoothies, juices and grinds. 538 Rochester Street

**Copper Branch**: A plant-based restaurant franchise founded in Montreal, 350 Albert St, 3161 Strandher Dr #301

### Byward Market:

**Peace-Garden Vegetarian Paradise**: A tiny vegetarian coffee shop that serves delicious daily specials, including burgers and Indian thali. 47 Clarence Street

### Sandy Hill:

**Govinda’s Vegetarian Buffet**: A non-for-profit vegetarian establishment run by the International Society for Krishna Consciousness. 212 Somerset St

### Old Ottawa South:

**Oat Couture Oatmeal Café**: A delicious and unique breakfast spot that serves delicious and unique oatmeal bowls. 1154 Bank Street

### Gatineau

**La Belle Verte**: serves a fresh and vibrant menu, with all items made site. 166 Eddy St, Gatineau
Vegan Bakeries

**Little Jo Berry’s**: A vegan coffee shop and bakery which whips up sweet treats, drinks and vegetarian lunches.
1305 Wellington St. W

**Strawberry Blonde Bakery**: Everything on the menu of this pick-up-and-go bakery is free of gluten, wheat, eggs, dairy and nuts.
111 Rickmond R, Westboro, 767 Silver Seven Rd, Kanata

**Cinnaholic**: A dessert shop with a 100% plant-based menu
900 Exhibition Way Unit 102

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Cafés

- Ministry of Coffee
- Black Squirrel
- Arlington Five
- Planet Coffee
- Art House Café
- Red Door Provisions
- Equator Coffee
- Little Victories
- Bridgehead
- Café Latté Cino
- Thyme & Again Café
- The Tea Party
- Bread and Sons
- Grow your Roots
- The Wild Oat Bakery Café
- Simply Raw Express
- Figaro
- Café qui pense
- Happy Goat Coffee Co.
A plant-based diet is not only good for the environment, but it’s also great for your health. Regardless of your current diet, be that meat-lover or vegan, eating more plant-rich meals can help lower your carbon “food”print. Here are a few tips and answers to some common questions about plant-based eating.

Including a variety of foods at every meal and following the Canadian Food Guide is a great way to ensure you are staying healthy and getting all the nutrients you need.

If you are worried about your nutritional intake, please consult with a physician or a dietician. Getting regular blood tests can help you monitor important blood serum levels, such as your vitamin B12 and iron.
In 2014, the Ontario government successfully eliminated coal-powered electricity and has been focused on renewable energy sources. While these steps move us towards clean energy, natural gases are still being consumed and nuclear power does generate hazardous waste. On an individual level, the following checklist provides some simple steps to reduce your carbon footprint (and save some money). As an advocate, energy divestment from fossil fuels is another important way to contribute.¹⁸

Changing your thermostat

<table>
<thead>
<tr>
<th></th>
<th>Spring/ Summer</th>
<th>Fall/Winter</th>
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<tbody>
<tr>
<td>When you’re at home</td>
<td>24-25 °C</td>
<td>20-22 °C</td>
</tr>
<tr>
<td>When you’re away from home/asleep</td>
<td>28 °C Sleep in basement</td>
<td>17-19 °C</td>
</tr>
</tbody>
</table>

Laundry

- Wait until having a full load to do laundry
- Do laundry on the cold wash setting
- Hang dry your laundry (ex. clothesline or drying rack, which helps your clothes last longer too)
- Collect lint from dryer’s lint trap after or before each use
- Use dryer’s automatic cycle to prevent over-drying
- Add a dry towel to your dryer to reduce time needed
- One can save 10-20% on electricity bill by air drying²⁶
Unplug devices and be mindful of phantom drainers

- Phantom energy is the electricity pulled from the outlet, even when the device is turned off
- Unplug toasters, kettles, lamps, cell phone chargers, etc. when not in use
- Try a ‘smart power bar’, which can house multiple devices and be turned off with an easy switch
- Save 10% on electricity bill by unplugging

Switch light bulbs from incandescent and CFL bulbs to EnergyStar certified LEDs

- They contain no harmful gases and are 90% more efficient, and can last up to 20 years
- LED holiday light strings > incandescent fairy lights
- For the bedroom, try warm or soft white LED lights
- For the kitchen and study areas, try bright white or daylight LED lights

Beat the Thermostat

- Dress warmer or take off layers before turning on the AC or heater
- Use a fan or ceiling fan instead of AC
- During the winter, set thermostat to a lower temperature before you head out and before going to bed
- Considering the weather, use the chart to adjust the thermostat accordingly
- Save 2% on heating bills by lowering thermostat by 1 degree, and up to 10% with continuous degrees lowered
The Kitchen

- Use a microwave, crock pot, or toaster oven instead of an oven
- Avoid overfilling your fridge
- Only run dishwasher when it’s full
- Turn off the ‘heat dry’ feature and let dishes air dry (saves up to 15% on electricity bill)
- Use the oven light to check on your food instead of opening your oven while baking

The Washroom/Bathroom

- Take shorter showers
- Turn down your water heater or use less hot water
- Turn water off when brushing teeth, scrubbing hands with soap, and shaving
- Lessening water use can save 100’s of dollars per year

The Bedroom

- Move furniture around air ducts in order to allow for air to circulate freely
- **Winter**: open curtains to let in sun and close at night to prevent draft from entering
- **Summer**: close curtains during day, especially to block afternoon sun according to direction of your window
- Use natural light to study, this can save up to 32% on electricity bills
We are seeing an increase in climate change related health issues in recent years. It is therefore important for physicians to advocate for their patients and their health by advocating for planetary health. There are many ways to get involved in the medical community and advocate for the environment and for climate justice.

1. Getting involved in advocacy groups

- **National level:**
  - Canadian Association Of Physicians For The Environment (CAPE)
  - Canadian Federation of Medical Students Health and Environment Adaptive Response Task Force (CFMS HEART) for medical students,
  - The Canadian Coalition for Green Healthcare.
- **uOttawa Medicine:**
  - uOttawa Sustainability and Climate Change Committee (SACC)
  - Planetary Health Interest Group (PHIG)
  - uOttawa Sustainability Office
  - Faculty of Medicine, Director of Planetary Health (Dr. Husein Moloo)

2. Keep an eye out for upcoming talks from the Planetary Health Interest Group (PHIG) and the Planetary Health: Community of Practice and Webinar series, which features expert speakers from across Canada, and is accredited by the RCPSC/CFPC. Additionally, there are also talks organized by other medical schools advertised through HEART newsletters and PHIG as well as free courses by the following universities/organizations:

   - Harvard University: The Health Effects of Climate Change
   - Yale University: Introduction to Climate Change and Health
   - World Health Organization: Health and Climate Change Toolkit
I. Climate Advocacy in Ottawa

3. It is also important to recognize the effects of climate change on different populations. The effects of climate change tend to disproportionately affect vulnerable populations, even in Canada by affecting both food and water security. One population especially affected by climate change is the Indigenous community. It is therefore important to advocate for climate justice to better advocate for the health of the different vulnerable communities.

Keep an eye out for Climate strikes in Ottawa around Parliament Hill.

There are many things you can do to become a greener healthcare practitioner in the future. You can use your voice to advocate for greener policies in your community. You can also participate in more sustainable practices in your future practice. Lastly, you can educate future healthcare practitioners on the interconnectedness between climate change and human health.
II. Getting Involved

How can I get involved in the fight against climate change?

HOW TO GET INVOLVED AT SCHOOL

- Sustainability and Climate Change Committee (SACC)
- Planetary Health Interest Group (PHIG): [https://www.facebook.com/groups/780507919432161/](https://www.facebook.com/groups/780507919432161/)
- University of Ottawa Sustainability Office: [https://sustainable.uottawa.ca/](https://sustainable.uottawa.ca/)
- Greening Health-Care Journal Club
- Collaborate with affiliated-physicians
  - Dr. Husein Moloo, Faculty of Medicine Director of Planetary Health
  - Dr. Laura Muldoon
  - Dr. Stephen Ballou
  - Dr. Courtney Howard

HOW TO GET INVOLVED AT HOME

- Bike paths: refer to map in Transportation section.
- Track your carbon footprint: [https://www.terrapass.com/carbon-footprint-calculator](https://www.terrapass.com/carbon-footprint-calculator)
- EnviroCentre: [https://www.envirocentre.ca/](https://www.envirocentre.ca/)
- Educate yourself and others on climate related issues
  - Books
    - The Uninhabitable Earth: Life After Warming by David Wallace-Wells
    - This Changes Everything: Capitalism vs The Climate by Naomi Klein
    - The Climate Book by Greta Thunberg
    - As Long As Grass Grows: The Indigenous Fight for Environmental Justice, From Colonization to Standing Rock by Dina Gilio-Whitaker
    - The Sixth Extinction: An Unnatural History by Elizabeth Kolbert
II. Getting Involved

HOW TO GET INVOLVED LOCALLY

- Ottawa Reduces: https://www.facebook.com/reduitottawareduces/
- Walkable Ottawa: a local initiative that advocates to make Ottawa’s maturing neighbourhoods into walkable communities
  - https://www.walkableottawa.ca/
- Ecology Ottawa: “founded in 2007 in a living room in Ottawa, Ecology Ottawa has since grown into a city-wide movement. We work with Ottawa residents, organizations and businesses to advocate for more vibrant green space, healthier watersheds, safer streets and stronger action on climate change.”
  - https://www.ecologyottawa.ca/
- Climate Justice Ottawa: a member of the climate justice movement that “advocates for alternatives to a carbon-centric economy that address the interests of marginalized communities”.
  - https://climatejusticeottawa.wixsite.com/home/about
- Indigenous Solidarity Ottawa: a grassroots movement based in Ottawa that supports the decolonization and the struggles of Indigenous communities.
  - https://indigenoussolidarityottawa.wordpress.com/
- Ottawa-Gatineau Climate Group: a climate justice coalition
  - https://www.instagram.com/ogcgroup/
- Ottawa RiverKeeper: a charitable organization that follows the WaterKeeper Alliance model to advocate for the protection and health of the Ottawa River.
  - https://ottawariverkeeper.ca/fr/
- Just Food: a grassroots and non-for-profit organization that engages in food policy conversations.
  - https://justfood.ca/
- Too Good to Go: an app to pick up leftover food from local restaurants at a reduced price
  - https://toogoodtogo.ca/en-ca
- Flashfood: an app to get savings on fresh food items to help combat food waste while saving money
  - https://www.flashfood.com/

Green Ottawa Directory: https://greenottawa.ca/directory/
CHAPTER 7

MENTAL HEALTH AND THE ENVIRONMENT

How does climate change and environmental degradation affect mental health?

Climate change can cause anxiety-related responses as well as chronic mental health disorders. The fallout from natural disasters such as loss of habitat, employment, loved ones, and community have been associated with elevated levels of anxiety, depression and post-traumatic stress disorders.

Extreme weather events have been associated with increases in aggressive behavior, domestic violence, and increased rates of substance use.

Eco-anxiety:

- Many individuals experience acute or chronic anxiety related to the environment, a phenomenon called eco-anxiety by researchers and mental health professionals.\(^\text{19}\)

- Even people living in safe and stable environments can experience this dread. As one psychologist notes, “the ability to process information and make decisions without being disabled by extreme emotions responses is threatened by climate change”.\(^\text{20}\)

- The perception that one is unable to make a difference in stopping climate change can lead to feelings of loss, helplessness and frustration. Many individuals also experience guilt when reflecting on their own behaviours and their impact on the environment.\(^\text{21}\) The environmental impacts of climate change can be insidious, and this includes drastic impacts on our mental health.
How can I address the mental health concerns brought on by climate change?

As future health-care professionals, medical students have a powerful influence on the views of patients and policy-makers in terms of climate change action.

Medical students can get involved with local environmental advocacy groups and volunteering can also help alleviate eco-anxiety.

Another great way to support mental health while caring for the environment is spending time in nature.

Research supports the fact that spending time outdoors increases mental wellbeing. Canadians physicians can now prescribe nature to their patients (www.parkprescriptions.ca). Science suggests that individuals report significantly better health and wellbeing if they spend at least 2 hours per week in nature.\(^{22}\)

Try spending a few hours a week outside exploring the parks and nature around and in Ottawa to support your own mental health!
What community resources are available for individuals facing mental health issues?

UNIVERSITY RESOURCES
- Faculty of Medicine Student Affairs Office (MEDSAO): https://med.uottawa.ca/undergraduate/students/student-affairs
- University of Ottawa Counselling Services: https://www.uottawa.ca/wellness/students/counsellors-and-specialists
- Virtual Wellness Lounge: https://www.uottawa.ca/wellness/lounge
- Campus Medical Clinic: https://bywardfht.ca/

COMMUNITY RESOURCES
- Your primary care physician.
- Canadian Mental Health Association Ottawa: https://ottawa.cmha.ca/
- Community agencies that offer walk-in counselling
  - Wabano Centre for Aboriginal Health: https://wabano.com/
  - Youth Services Bureau: https://www.ysb.ca/
  - Crossroads Children’s Mental Health Center: https://crossroadschildren.ca/
  - Nepean, Rideau and Osgoode Community Resource Centre: http://www.nrocrc.org/
- All local hospitals:
  - Montfort Hospital: https://hopitalmontfort.com/fr/santementale
  - The Ottawa Hospital: https://www.ottawahospital.on.ca/en/clinical-services/deptpgrmcs/departments/mental-health/our-services/
  - The Royal: https://www.theroyal.ca/
  - Queensway Carleton Hospital: https://www.qch.on.ca/MentalHealth

ONLINE SUPPORT GROUPS
- Togetherall: https://togetherall.com/en-ca/
- BounceBack: https://bouncebackontario.ca/

DISASTER PLANNING

TO LEARN MORE
- Handbook of Climate Psychology: https://www.climatepsychologyalliance.org/
Since 2019, the COVID-19 pandemic has raised uncertainty worldwide. Aside from overwhelming hospitals, it has caused an economic and emotional burden. More so, the pandemic raises the question of the relationship between health and climate change. For instance, global changes allow for a larger interface between humans and other animals, which may be vehicles for zoonotic diseases. Infectious outbreak seemed imminent because of population growth, habitat destruction and excessive livestock farming. One may then wonder how the COVID-19 pandemic is correlated to climate change. How much weight can we attribute to climate change in causing the emergence of COVID-19, both current and very real existential threats?

As we begin to move out of the pandemic, the psychological effects of the upheaval over the past few years continues to linger across all age groups. How then, do we move forward from the pandemic in a healthy and green way? We hope that this Green Book serves as a guide to answer just that, but also to shed light upon questions you might have about sustainability and climate change. Hopefully, the lessons learned from COVID can then be used to fight the more and more palpable global climate crisis.
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Acknowledgements:

Also thanks to SACC Committee 2021-2022 and Denny Choi, MPH from the University of Toronto for their suggestions; Sarah Lazarovic for her artwork.
References


